

## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

217/524-3300

September 7, 2001

CERTIFIED MAIL 7099 3400 0001 1279 0219

Mr. Mark Schultz
Department of the Navy
Navy Public Works Center
Building 1-A
2703 Sheridan Road, Suite #120
Great Lakes, Illinois 60088-5600

Re:

0971255004 -- Lake County

U.S. Navy Great Lakes Naval Training Center

IL7170024577 Log No. C-689-M-7 Received: May 17, 2001

RCRA Closure

Dear Mr. Schultz:

This is a follow-up to Illinois EPA's letter dated June 29, 2001 (Log No. C-689-M-7) regarding RCRA closure activities at the above-referenced facility (a copy of that letter is attached). It appears as though the Illinois EPA did not include pages 2 and 3 of this June 29, 2001 letter. Illinois EPA would like to apologize for this error and wanted to bring it to your attention so that any confusion which this error caused could be minimized.

Attached is a copy of pages 2 and 3 which were omitted. Please include these pages to the June 29, 2001 letter.

Please place a copy of this follow-up letter in your files for future reference in case there are any discrepancies in the future regarding this matter.

If you have any questions regarding this letter, please contact William T. Sinnott, II at 217/524-3310.

Sincerely,

Joyce L. Munie, P.E.

Manager, Permit Section

Bureau of Land

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Attachment:

Pages 2 and 3 of C-689-M-7

GEORGE H. RYAN, GOVERNOR

## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY



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June 29, 2001

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Mr. Mark Schultz
Department of the Navy
Navy Public Works Center
Building 1-A
2703 Sheridan Road, Suite #120
Great Lakes, Illinois 60088-5600

Re:

0971255004 -- Lake County

U.S. Navy Great Lakes Naval Training Center

IL7170024577

Log No. C-689-M-7

Received: May 17, 2001

RCRA Closure

Dear Mr. Schultz:

This letter is in response to the five "RCRA Closure Plans" submitted May 16, 2001 on your behalf by Robert R. Beckwith, PG, of TolTest, Inc. These plans dealt with RCRA closure activities at five (5) hazardous waste container storage areas at the above-referenced facility referred to as Building 105, Building 145, Building 415, Building 520 and Building 912.

The subject submittals were received as requests to modify the approved final RCRA closure plan for the Great Lakes Naval Training Center (Log No. C-689 and associated modifications) and are hereby approved subject to the following conditions and modifications:

- Except as modified herein, closure activities at the above-referenced facility must be carried out in accordance with 35 Ill. Adm. Code 725, Subpart G and Illinois EPA letters of March 10, 1999 (Log No. C-689-M-6); March 31, 1998 (Log No. C-689-M-5); February 21, 1997 (Log No. C-689-M-4; September 9, 1996 (Log No. C-689-M-3); September 28, 1995 (Log No. C-689-M-2); June 12, 1995 (Log No. C-689-M-1); and March 6, 1994 (Log No. C-689).
- 2. The extent of soil contamination has been defined at Buildings 105, 415 and 912. Soil contamination detected at these units may not require remediation provided engineered barriers and deed restrictions are completed meeting the requirements in 35 Ill. Adm. Code 742 (TACO).

GEORGE H. RYAN, GOVERNOR

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Mr. Mark Schultz Log No. C-689-M-7 Page 2

- A report must be developed and submitted to Illinois EPA for review and approval which clearly demonstrates how the TACO requirements are being met in developing appropriate remediation objectives (ROs) for these units. This report should:
  - (1) Identify the regulations that are being used to develop RO;
  - (2) Demonstrate compliance with the requirements associated with each of these regulations; and
  - (3) Demonstrate that the RO's meet the requirements of 35 Ill. Adm. Code 742.

Supporting information for all data used in the development of these ROs must be provided in the report including: (1) documentation that the information used was appropriate, including the results of all testing conducted; (2) all calculations which were made in developing the ROs; and (3) a description of how all the information used in these efforts was obtained. Additional general guidance regarding TACO requirements for RCRA projects is attached.

- b. Appropriate steps must be taken to support the soil remediation objectives eventually approved (such as the establishment of engineered barriers and institutional controls) and to remediate any contamination above the approved remediation objectives. These steps must be made as modifications to this approved closure plan and are subject to Illinois EPA review and approved.
- 3. Great Lakes Naval Training Center has proposed to collect soil samples from beneath and around Building 105. This proposal also indicates that these samples will be analyzed for physical and chemical parameters. In a letter dated March 10, 1999 (Condition 2), the Illinois EPA indicated that no further soil sample analysis for the constituents of concern is necessary, as the extent of soil contamination has been adequately determined at this unit.
- 4. Illinois EPA stated in a letter dated September 28, 1995 that no further closure efforts were necessary at Building 145, provided that a site-safety plan addressing worker exposure to the remaining soils beneath that building was developed and implemented during any future excavation or construction at that unit. While a site safety plan was included in the subject submittal, the institutional control to be used to ensure the plan will be properly implemented in the future was not. Thus, a proposed institutional control meeting the requirements of 35 Ill. Adm. Code 742 must be submitted to Illinois EPA for review and approval.

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- 5. Condition 6 of the Illinois EPA's letter dated March 10, 1999 indicated that Building 415 (Navy Exchange S01 Area) and Building 912 (Navy Resale Activity Laundry S01 Area) may be clean closed at this time relative to groundwater.
- 6. The groundwater investigative efforts proposed for building 105 are hereby approved subject to the following conditions and modifications and these conditions/modifications are from the Illinois EPA's March 10, 1999 letter which are as follows:
  - a. Building 105 (Former Laundry SO1 Area) cannot be clean closed at this time with respect to groundwater. Pursuant to the sampling/analysis results provided, two (2) parameters, tetrachloroethene (PCE) and cis-1,2-dichloroethene (DCE) have been detected in groundwater in excess of the Class I and/or Class II Groundwater Quality Standards. Therefore, as required by Condition 4 of the Illinois EPA's September 9, 1996 letter (Log #C-689-M-3) and Condition 10 of the Illinois EPA's March 31, 1998 letter (Log #C-689-M-5) the vertical and horizontal extent of groundwater contamination must be determined in the vicinity of Building 105. The extent of contamination must be delineated by exceedances of the applicable 35 Ill. Adm. Code Part 620 Groundwater Quality Standards for PCE and cis-1,2-DCE.
  - b. At this time, the "Class II General Resource Groundwater Quality Demonstration" contained in Appendix J of the submittal, cannot be approved by the Illinois EPA due to the lack of supporting documentation regarding the determination of the appropriate 35 Ill. Adm. Code Part 620 groundwater classifications at the site. The supporting documentation must be submitted, along with the information required by Condition 6.e below, addressing each criteria as outlined in 35 Ill. Adm. Code 620.210 for the Illinois EPA's review and approval. The determination of vertical and horizontal extent required by Condition 6.a above may be postponed until the Illinois EPA approves the appropriate groundwater classification in accordance with 35 Ill. Adm. Code 620.210.
  - c. The facility shall conduct a TACO analysis in accordance with 35 Ill. Adm. Code Part 742 for groundwater contamination in the vicinity of Building 105. At a minimum, the following are required:
    - (1) Determination of groundwater classification in accordance with 35 III. Adm. Code Part 620;
    - (2) Collection of site-specific parameters for use in the analysis including source concentration, distance to receptor (downgradient property boundary), source width, source depth, in-situ hydraulic conductivity,

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hydraulic gradient, and total soil porosity. Please note that additional field work may be necessary to collect data associated with the site-specific parameters.

- (3) Construction of a groundwater flow map for the area around Building 105.
- **(4)** The extent of groundwater impacts delineated by the extent of groundwater contamination present beneath Building 105.
- d. Within ninety (90) days the facility must submit additional information addressing groundwater contamination in the vicinity of Building 105 for the Illinois EPA's review and approval. This submittal shall include at a minimum:
  - (1) Supporting documentation and evaluation of groundwater levels in regards to the applicable groundwater classification, as outlined in 35 Ill. Adm. Code 620.210 and as required by Condition 6.b above;
  - **(2)** A completed TACO analysis conducted in accordance with 35 Ill. Adm. Code Part 742 and as required by Condition 6.c above;
  - (3)for additional groundwater investigation in the vicinity of Building 105 and as required by Condition 6.a above; and
  - (4) for additional groundwater sampling/analysis associated with groundwater activities in the vicinity of Building 105.
- As required by the Illinois EPA's March 31, 1998 letter (Condition 11, Log No. e. C-689-M-5), SW-846 Method 8260B shall be used to analyzed any collected groundwater samples for volatile organic compounds. SW-846 Methods 8240 (for VOCs) and 8310 (for PNAs) were used to analyze the June 1998 groundwater samples. Pursuant to the Final (Promulgated) Update III to the USEPA's Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW-846), Third Edition, dated December 1996, Method 8240 has been removed. Update III replaced Method 8240 with Method 8260B. Therefore, SW-846 Method 8260B must be used in all future groundwater analysis events in order for analytical results to be considered valid.

As required by the Illinois EPA's March 31, 1998 letter (Condition 12, Log No. C-689-M-5), all well completion reports, boring logs and copies of well abandonment forms for each temporary well point installed as listed below shall be

submitted for the Illinois EPA's review. This information must be submitted with the information required by condition 6.d above.

GL98-415G-01	GL98-105G-11	GL98-912G-21
GL98-415G-02	GL98-105G-12	GL98-912G-22
GL98-415G-03	GL98-105G-13	GL98-912G-24
GL98-415G-04	GL98-105G-14	GL98-912G-25
GL98-415G-05	GL98-105G-15	GL98-912G-26
GL98-415G-06	GL98-105G-16	GL98-912G-27
GL98-415G-07	GL98-105G-17	GL98-912G-28
GL98-415G-08	GL98-105G-18	GL98-912G-29
GL98-415G-09	GL98-105G-19	GL98-105G-20

- 7. Any institutional controls used to meet the requirements of TACO must meet the requirements of 35 Ill. Adm. Code 742, Subpart J. It is understood that the Department of the Navy has worked with the Illinois EPA to develop a process for establishing acceptable institutional controls at facilities owned by the Department of Defense.
- 8. Illinois EPA's June 12, 1995 letter (Log No. C-689-M-1) stated that no further action was necessary to properly close Building 520, with the exception of submitting the final certification of closure and associated closure documentation report required by 35 Ill. Adm. Code 725.215.
- 9. Once closure of Buildings 105, 145, 415, 520 and 912 has been completed in accordance with the approved plans and modifications, a final certification of closure and associated closure documentation report meeting the requirements of 35 III. Adm. Code 725.215 must be submitted to Illinois EPA for review and approval. The certification statement must meet the requirements of 35 III. Adm. Code 702.126. Additional guidance for this certification/report is provided in Condition 13 of Illinois EPA's March 10, 1999 letter.
- 10. The following table summarizes the efforts which must be conducted to complete closure of Buildings 105, 145, 415, 520 and 912:

## Building Remaining Closure Activities

Develop soil remediation objectives using the procedures set forth in 35 III. Adm. Code 742. Conduct remediation of any soil contamination exceeding approved remediation objectives (this includes the establishment of any engineered barriers and institutional controls necessary to support the proposed remediation objectives). Conduct groundwater investigation and remediation, as necessary, in accordance with the provisions of this letter. After all remedial activities have

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been completed, submit final certification of closure and associated closure documentation report after completion of closure of Buildings 145, 415, 520 and 912.

## Building Remaining Closure Activities

- Submit proposed institutional control meeting requirements of 35 Ill. Adm. Code 742 to restrict access/exposure to soils beneath building. Once institutional control has been approved, properly file it in accordance with 35 Ill. Adm. Code 742. Finally, submit certification of closure and associated closure documentation report when closure of Buildings 105, 145, 415, 520 and 912 have been completed.
- Same as Building 105 except no need to further investigate groundwater (see Condition 5 above).
- Submit final certification of closure and associated closure documentation report once all closure activities have been completed for Buildings 105, 145, 415, 520 and 912.
- 912 Same as Building 105 except no need to further investigate groundwater (see Condition 5 above).
- 11. Closure efforts at this facility must meet the requirements of 35 Ill. Adm. Code 725, Subpart G. Any variation to the closure activities approved by this letter shall be the subject of a request to modify the approved closure plan which is submitted to Illinois EPA for review and approval. Any such request must contain detailed information regarding the proposed modifications and the procedures which will be followed to complete closure of the unit(s). In addition, this request must contain information demonstrating that the proposed modifications meet the requirements of 35 Ill. Adm. Code 725, Subpart G. A revised schedule for completing the various tasks necessary to complete closure must be included in this request.

Within 35 days of the date of mailing of this Illinois EPA's final decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of the Illinois EPA, however, the 35-day period for petitioning for a hearing may be extended for a period of time not to exceed ninety days by written notice provided to the Board from the applicant and the Illinois EPA within the 35-day initial appeal period.

Work required by this letter, your application or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Land Surveyor Act of 1989, the Professional Engineering Practice Act of 1989, the Professional Geologist Licensing Act, and the

Mr. Mark Schultz Log No. C-689-M-7 Page 7

Structural Engineering Licensing Act of 1989. This letter does not relieve anyone from compliance with these laws and regulations adopted pursuant to these laws. All work that falls within the scope and definition of these laws must be performed in compliance with them. The Illinois EPA may refer any discovered violations of these laws to the appropriate regulating authority.

Should you have any questions related to groundwater about this project, please contact Jeff Guy at 217/558-2710; any other questions regarding this project should be directed to William T. Sinnott, II at 217/524-3310.

Sincerely,

Joyce L. Munie, F.E. Manager, Permit Section

Bureau of Land

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Attachments: LPC-PA18

TACO Requirements for Soil Remediation Objectives Associated with RCRA

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